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## FLEAS AND THEIR CONTROL

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AUG 9 1983

It is estimated that throughout the world there are approximately 1200 species of these small, wingless insects. All of them feed on animal hosts. While most species seem to have a preference for some particular animal and many get their common names from the host they are most commonly found on, almost all species, when hungry, will feed on practically any available warm-blooded host. The chicken flea is found on rats in abundance and cat fleas feed on dogs as often as dog fleas. This loose host preference is responsible for the transmissions, by fleas, of rodent reservoir diseases to human beings, since rat fleas readily feed on people.

## Human Diseases Transmitted by Fleas

Certain species of fleas, while feeding upon rodents that are infected with plague or murine typhus fever, swallow the germs which cause these diseases and later when they feed upon other rodents or human beings, deposit these germs in the puncture or on the skin near the bite. Fleas are greedy eaters that vomit or defacate while feeding. When we rub or scratch the bitten place, germs are carried into the wound and we become infected with the disease. Plague organisms are usually transmitted in the vomit and typhus organisms in the feces.

One flea species which burrows into the skin, sometimes carries the tetanus organism in with it and causes the victim to have lockjaw. In a small Central American country, 250 deaths during a four year period were caused in this manner.

Fleas also affect human health to a small degree by serving as intermediate hosts in the developmental cycle of certain tapeworms.

If fleas did not transmit human diseases they would still be highly undesirable pests. Their irritating bites cause much annoyance and sometimes result in secondary infections. Some people are more adversely affected than others by flea bites, while with many the bites are hardly noticeable.

## Life Cycle and Habits of Fleas

Fleas usually mate while on the host. The white eggs, which range in number from 3 to 18 at a time, are deposited in the hairs or feathers of the host and drop off shortly afterwards. As egg laying usually takes place when the host is asleep or